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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,816

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Tomaz Mesar

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EXAMINER

COLEMAN, BRENDA LIBBY

ART UNIT

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1624

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,816	<b>Applicant(s)</b> MESAR ET AL.	
	<b>Examiner</b> Brenda L. Coleman	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,22,24,26,27,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,22,24,26,27,35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-6, 22, 24, 26, 27, 35 and 36 are pending in the application.

This action is in response to applicants' amendment filed March 10, 2010.

Claims 25-35, 39 and 41 have been amended and claims 42-56 are newly added.

### ***Response to Amendment***

Applicant's amendments filed March 10, 2010 have been fully considered with the following effect:

1. The applicants' amendments are sufficient to overcome the 35 U.S.C. § 112, second paragraph rejections labeled paragraph 2a), b), c) and d) in the last office action, which are hereby **withdrawn**.
2. The applicants' amendments and arguments are sufficient to overcome the 35 U.S.C. § 102, anticipation rejection labeled paragraph 3) in the last office action, which is hereby **withdrawn**.
3. The applicants' amendments and arguments are sufficient to overcome the 35 U.S.C. § 102, anticipation rejection labeled paragraph 4) in the last office action, which is hereby **withdrawn**.
4. The applicants' amendments and arguments are sufficient to overcome the 35 U.S.C. § 102, anticipation rejection labeled paragraph 5) in the last office action, which is hereby **withdrawn**.

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5. The applicants' amendments and arguments are sufficient to overcome the 35 U.S.C. § 102, anticipation rejection labeled paragraph 6) in the last office action, which is hereby **withdrawn**.

6. With regards to the 35 U.S.C. § 102(e) anticipation rejection of claims 1-7, 22-27, 35 and 36 labeled paragraph 7), in the last office action, the applicant's arguments have been fully considered but are not found persuasive. The applicants' stated that the Keltjens '720 application mentions what is said to be the reaction of olanzapine with acetic acid and the formation of the acetate acid addition salt in Examples 4 and 6 cited by the Examiner and that Keltjens '720 does not disclose or suggest transformation of these acid addition salts back to free form olanzapine as called for in Claim 1. Keltjens teaches a common method of making the olanzapine acetate in solid state is contacting a source of olanzapine with acetic acid in a solvent, and precipitating the olanzapine acetate from said solvent. The aqueous solubility of olanzapine acetate limits the number of useful solvent systems. Preferably, such solvent system should not comprise water but this does not preclude using mixtures of nonaqueous solvents with water in the process. Suitable solvents comprise C1-C6 aliphatic ketones, C1-C6 ethers (incl. cyclic ethers) or C1-C6 esters. The most useful solvent in making the olanzapine acetate is acetone. Olanzapine base and sources thereof are generally sufficiently soluble therein as well as acetic acid, while olanzapine acetate is only slightly soluble in acetone. Thus acetone is a good solvent for affording contacting of the olanzapine base material and acetic acid as well as for facilitating the subsequent

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precipitation or crystallization of the olanzapine acetate. Other useful solvents are ethylacetate and tetrahydrofuran. See paragraph [0034]

Claims 1-6, 22, 24, 26, 27, 35 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiltjens, U.S. Patent Application No. 2005/0272720, for reasons of record and stated above.

In view of the amendment dated March 10, 2010, the following new grounds of rejection apply:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-6, 22, 24, 26, 27, 35 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following reasons apply:

a. The amendment to claim 1 where step i) includes the formation of an “aqueous solution” is not described in the specification with respect to the purification of olanzapine;

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- b. The amendment to claim 1 where step ii) is to the adjustment of the pH of the “aqueous solution” is not described in the specification with respect to the purification of olanzapine;
- c. The amendment to claim 1 where step iii) is to the extraction of olanzapine from the “aqueous phase” is not described in the specification with respect to the purification of olanzapine;
- d. The amendment to claim 1 where step iv) where the solution is concentrated to “form olanzapine salt crystals” is not described in the specification with respect to the purification of olanzapine;
- e. The amendment to claim 2 where the organic acid in step (a) is selected from “one or more” sulfonic or carboxylic acids is not described in the specification with respect to the purification of olanzapine;
- f. The amendment to claim 3 where the “one or more” carboxylic acid is selected from “one or more” fumaric acid and benzoic acid is not described in the specification with respect to the purification of olanzapine;
- g. The amendment to claim 4 where the organic solvent in step (a) is selected from “one or more” of tetrahydrofuran, acetone, dimethylformamide and acetonitrile is not described in the specification with respect to the purification of olanzapine;
- h. The amendment to claim 6 where the polar solvent is selected from “one or more” of dimethylformamide..... is not described in the specification with respect to the purification of olanzapine;

- i. The amendment to claim 22 where the organic solvent of step ii) includes "mixures thereof" is not describe in the specification with respect to the preparation of olanzapine in the form of an acid addition salt;
- j. The amendment to claim 24 where the chlorinated organic solvent is added to provide separable "aqueous" and organic phase in step c) is not described in the specification with respect to the preparation of olanzapine in the form of an acid addition salt;
- k. The amendment to claim 24 where the "aqueous phase" is neutralized in step d) is not described in the specification with respect to the preparation of olanzapine in the form of an acid addition salt;
- l. The amendment to claim 35 where the "detectible" N-desmethyloanzapine content is not described in the specification with respect to olanzapine prepared by the processes disclosed in claim 1; and
- m. The amendment to claim 36 where the "detectible" amount is not described in the specification with respect to olanzapine prepared by the processes disclosed in claim 1.

Applicant is required to cancel the new matter in the reply to this Office action.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda L. Coleman whose telephone number is 571-272-0665. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a



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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brenda L. Coleman/  
Primary Examiner, Art Unit 1624